

AMENDED CLAIMS

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original claims 1 and 2 amended (2 pages)]

CLAIMS

1. (Amended) A gear shifting completion determination device for an automatic transmission applied to an automatic transmission coupled to a motive power source via a fluid coupling, and determining whether an upshift in an accelerator off mode is completed or not, said gear shifting completion determination device comprising:

an output shaft revolution detection unit (400) detecting an output shaft revolution of said motive power source,

an input shaft revolution detection unit (410) detecting an input shaft revolution of said automatic transmission,

a calculation unit (1010) calculating a synchronizing revolution that is a probable value of the input shaft revolution of said automatic transmission after gear shifting,

a determination unit (1010) determining that gear shifting has been completed when a state of said detected input shaft revolution of said automatic transmission synchronizing with said calculated synchronizing revolution continues for at least a determination time, and

a setting unit (1010) setting said determination time based on said detected input shaft revolution of said automatic transmission and said output shaft revolution of said motive power source,

wherein said setting unit (1010) sets said determination time shorter when a difference between the input shaft revolution of said automatic transmission and the output shaft revolution of said motive power source is large as compared to a state in which said difference is small.

2. (Amended) The gear shifting completion determination device for an automatic transmission according to claim 1, wherein said setting unit (1010) sets said

determination time to a first time when a difference between the output shaft revolution of said motive power source and the input shaft revolution of said automatic transmission is at least a predetermined value, and sets said determination time to a second time that is shorter than said first time when said difference is smaller than said
5 predetermined value.